

## CLAIMS

What is claimed is:

- 1 1. A method of emulating a network environment comprising the steps of:  
2 receiving, with a test system including a network processor programmed to function as a  
3 network emulator, an input packet stream; and  
4 providing, with said test system including a network processor, an output packet stream  
5 wherein said output packet stream comprises a modification of said input packet stream.
- 1 2. The method of claim 1 wherein said step of providing comprises providing an output  
2 packet stream having at least one characteristic, said at least one characteristic selected from the  
3 group consisting of delay, jitter, packet loss, dropped packets and reordered packets.
- 1 3. The method of claim 1 wherein said step of providing comprises providing an output  
2 packet stream having characteristics of a predefined output packet stream.
- 1 4. The method of claim 1 wherein said predefined output packet stream is representative of  
2 a user's environment.
- 1 5. The method of claim 1 wherein said predefined output packet stream comprises a worst  
2 case test scenario.
- 1 6. The method of claim 1 wherein said step of receiving comprises receiving an input packet  
2 stream selected from the group consisting of VOIP and MOP.
- 1 7. The method of claim 1 wherein said step of providing comprises providing an output  
2 packet stream selected from the group consisting of VOIP and MOP.
- 1 8. The method of claim 2 wherein said at least one characteristic changes over time.

1 9. The method of claim 1 wherein said step of providing includes substituting a payload of a  
2 packet with an audio clip.

1 10. The method of claim 9 wherein said audio clip is selected from the group consisting of a  
2 silence clip, a tone clip, a prerecorded audio clip, and a PSQM clip.

1 11. The method of claim 1 wherein said step of receiving comprises receiving on an interface  
2 selected from the group consisting of 10Mbit Ethernet, 100 Mbit Ethernet, 1 Gigabit Ethernet,  
3 1.0624 Gbit Fibrechannel, OC-3c, OC-12, OC-12c, T-1/E-1 and T-3/E-3.

1 12 The method of claim 1 wherein said step of providing comprises providing on an  
2 interface selected from the group consisting of 10Mbit Ethernet, 100 Mbit Ethernet, 1 Gigabit  
3 Ethernet, 1.0624 Gbit Fibrechannel, OC-3c, OC-12, OC-12c, T-1/E-1 and T-3/E-3.

1 13. A test system comprising:  
2 a network processor programmed to function as a network emulator;  
3 an input port in communication with said network processor, said input port capable of  
4 receiving an input packet stream; and  
5 an output port in communication with said network processor, wherein said network  
6 processor is capable of providing an output packet stream on said output port, said output packet  
7 stream comprising a modification of said input packet stream.

1 14. The test system of claim 13 wherein said output packet stream has at least one  
2 characteristic, said at least one characteristic selected from the group consisting of delay, jitter,  
3 packet loss, dropped packets and reordered packets.

1 15. The test system of claim 13 wherein said output packet stream has characteristics of a  
2 predefined output packet stream.

1 16. The test system of claim 13 wherein said output packet stream is representative of a  
2 user's environment.

1 17. The test system of claim 13 wherein said output packet stream comprises a worst case  
2 test scenario.

1 18. The test system of claim 13 wherein said input packet stream is selected from the group  
2 consisting of VOIP and MOP.

1 19. The test system of claim 13 wherein said output packet stream is selected from the group  
2 consisting of VOIP and MOP.

1 20. The test system of claim 14 wherein said at least one characteristic changes over time.

1 21. The test system of claim 13 wherein a payload of a packet within said output stream has  
2 been substituted with an audio clip.

1 22. The test system of claim 21 wherein said audio clip is selected from the group consisting  
2 of a silence clip, a tone clip, a prerecorded audio clip, and a PSQM clip.

1 23. The test system of claim 13 wherein said input port is selected from the group consisting  
2 of 10Mbit Ethernet, 100 Mbit Ethernet, 1 Gigabit Ethernet, 1.0624 Gbit Fibrechannel, OC-3c,  
3 OC-12, OC-12c, T-1/E-1 and T-3/E-3.

1 24 The test system of claim 13 wherein said output port is selected from the group consisting  
2 of 10Mbit Ethernet, 100 Mbit Ethernet, 1 Gigabit Ethernet, 1.0624 Gbit Fibrechannel, OC-3c,  
3 OC-12, OC-12c, T-1/E-1 and T-3/E-3.

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